

# FIG - 1

1/5

|      |   |      |
|------|---|------|
| 1    | CTG AGC TGC ATC ATG GTG CGG TCT GTG GCC TGG GCA GGT TTC ATG GTC CTG CTG | 54   |
| 1    | M V R S V A W A G F M V L L   | 14   |
| 55   | ATG ATC CCA TGG GGC TCT GCT GCA AAA CTG GTC TGC TAC TTC ACC AAC TGG GCC | 108  |
| 15   | M I P W G S A A K L V C Y F T N W A                                     | 32   |
| 109  | CAG TAC AGA CAG GGG GAG GCT CGC TTC CTG CCC AAG GAC TTG GAC CCC AGC CTT | 162  |
| 33   | Q Y R Q G E A R F L P K D L D P S L                                     | 50   |
| 163  | TGC ACC CAC CTC ATC TAC GCC TTC GCT GGC ATG ACC AAC CAC CAG CTG AGC ACC | 216  |
| 51   | C T H L I Y A F A G M T N H Q L S T                                     | 68   |
| 217  | ACT GAG TGG AAT GAC GAG ACT CTC TAC CAG GAG TTC AAT GGC CTG AAG AAG ATG | 270  |
| 69   | T E W N D E T L Y Q E F N G L K K M                                     | 86   |
| 271  | AAT CCC AAG CTG AAG ACC CTG TTA GCC ATC GGA GGC TGG AAT TTC GGC ACT CAG | 324  |
| 87   | N P K L K T L L A I G G W N F G T Q                                     | 104  |
| 325  | AAG TTC ACA GAT ATG GTA GCC ACG GCC AAC AAC CGT CAG ACC TTT GTC AAC TCG | 378  |
| 105  | K F T D M V A T A N N R Q T F V N S                                     | 122  |
| 379  | GCC ATC AGG TTT CTG CGC AAA TAC AGC TTT GAC GGC CTT GAC CTT GAC TGG GAG | 432  |
| 123  | A I R F L R K Y S F D G L D L D W E                                     | 140  |
| 433  | TAC CCA GGA AGC CAG GGG AGC CCT GCC GTA GAC AAG GAG CGC TTC ACA ACC CTG | 486  |
| 141  | Y P G S Q G S P A V D K E R F T T L                                     | 158  |
| 487  | GTA CAG GAC TTG GCC AAT GCC TTC CAG CAG GAA GCC CAG ACC TCA GGG AAC GAA | 540  |
| 159  | V Q D L A N A F Q Q E A Q T S G K E                                     | 176  |
| 541  | CGC CTT CTT CTG AGT GCA GCG GTT CCA GCT GGG CAG ACC TAT GTG GAT GCT GGA | 594  |
| 177  | R L L L S A A V P A G Q T Y V D A G                                     | 194  |
| 595  | TAC GAG GTG GAC AAA ATC GCC CAG AAC CTG GAT TTT GTC AAC CTT ATG GCC TAC | 648  |
| 195  | Y E V D K I A Q N L D F V N L M A Y                                     | 212  |
| 649  | GAC TTC CAT GGC TCT TGG GAG AAG GTC ACG GGA CAT AAC AGC CCC CTC TAC AAG | 702  |
| 213  | D F H G S W E K V T G H N S P L Y K                                     | 230  |
| 703  | AGG CAA GAA GAG AGT GGT GCA GCA GCC AGC CTC AAC GTG GAT GCT GCT GTG CAA | 756  |
| 231  | R Q E E S G A A A S L N V D A A V Q                                     | 248  |
| 757  | CAG TGG CTG CAG AAG GGG ACC CCT GCC AGC AAG CTG ATC CTT GGC ATG CCT ACC | 810  |
| 249  | Q W L Q K G T P A S R L I L G M P T                                     | 266  |
| 811  | TAC GGA CGC TCC TTC ACA CTG GCC TCC TCA TCA GAC ACC AGA GTG GGG GCC CCA | 864  |
| 267  | Y G R S F T L A S S S D T R V G A P                                     | 284  |
| 865  | GCC ACA GGG TCT GGC ACT CCA GGC CCC TTC ACC AAG GAA GGA GGG ATG CTG GCC | 918  |
| 285  | A T G S G T P G P F T K E G G M L A                                     | 302  |
| 919  | TAC TAT GAA GTC TGC TCC TGG AAG GGG GCC ACC AAA CAG AGA ATC CAG GAT CAG | 972  |
| 303  | Y Y E V C S W K G A T K Q R I Q D Q                                     | 320  |
| 973  | AAG GTG CCC TAC ATC TTC CGG GAC AAC CAG TGG GTG GGC TTT GAT GAT GTG GAG | 1026 |
| 321  | K V P Y I F R D N Q W V G F D D V E                                     | 338  |
| 1027 | AGC TTC AAA ACC AAG GTC AGC TAT CTG AAG CAG AAG GGA CTG GGC GGG GCC ATG | 1080 |
| 339  | S F K T K V S Y L K Q K G L G G A M                                     | 356  |
| 1081 | GTC TGG GCA CTG GAC TTA GAT GAC TTT GCC GGC TTC TCC TGC AAC CAG GGC CGA | 1134 |
| 357  | V W A L D L D D F A G F S C N Q G R                                     | 374  |
| 1135 | TAC CCC CTC ATC CAG ACG CTA CGG CAG GAA CTG AGT CTT CCA TAC TTG CCT TCA | 1188 |
| 375  | Y P L I Q T L R Q E L S L P Y L P S                                     | 392  |
| 1189 | GGC ACC CCA GAG CTT GAA GTT CCA AAA CCA GGT CAG CCC TCT GAA CCT GAG CAT | 1242 |
| 393  | G T P E L E V P K P G Q P S E P E H                                     | 410  |
| 1243 | GGC CCC AGC CCT GGA CAA GAC ACG TTC TGC CAG GGC AAA GCT GAT GGG CTC TAT | 1296 |
| 411  | G P S P G Q D T F C Q G K A D G L Y                                     | 428  |
| 1297 | CCC AAT CCT CGG GAA CGG TCC AGC TTC TAC AGC TGT GCA GCG GGG CGG CTG TTC | 1350 |
| 429  | P N P R E R S S F Y S C A A G R L F                                     | 446  |
| 1351 | CAG CAA AGC TGC CCG ACA GGC CTG GTG TTC AGC AAC TCC TGC AAA TGC TGC ACC | 1404 |
| 447  | Q Q S C P T G L V F S N S C K C C T                                     | 464  |
| 1405 | TGG AAT TGA GTC GTA AAG CCC CTC CAG TCC AGC TTT GAG GCT GGG CCC AGG ATC | 1458 |
| 465  | W N ***   | 466  |
| 1459 | ACT CTA CAG CCT GCC TCC TGG GTT TTC CTG GGG GCC GCA ATC TGG CTC CTG CAG | 1512 |
| 1513 | GCC TTT CTG TGG TCT TCC TTT ATC CAG GCT TTC TGC TCT CAG CCT TGC CTT CCT | 1566 |
| 1567 | TTT TTC TGG GTC TCC TGG GCT GCC CCT TTC ACT TGC AAA ATA AAT CTT TGG TTT | 1620 |
| 1621 | GTG CCC CTC TTC AAA AAA AA  |      |

0997827-101501

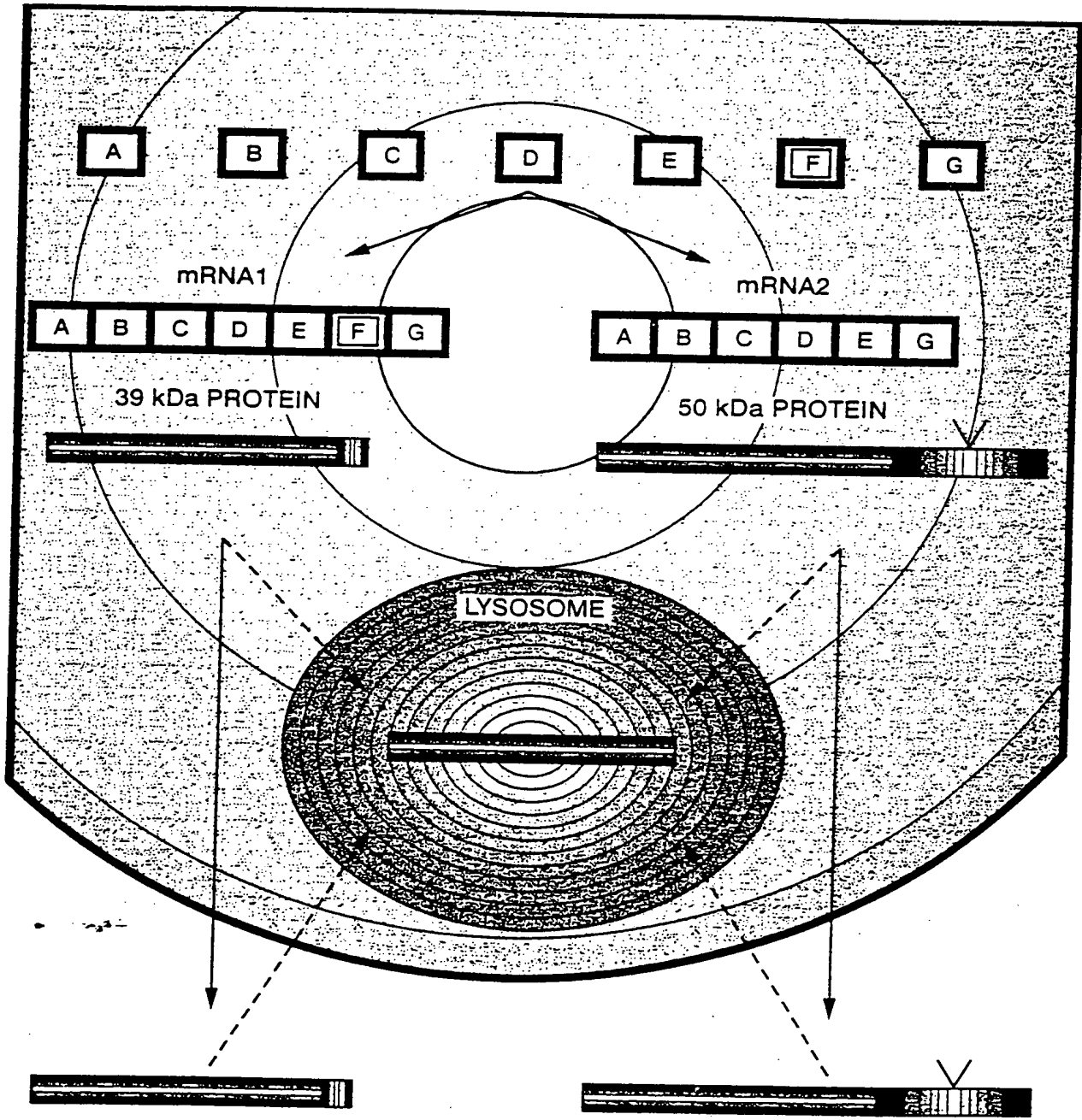
# FIG - 2

2/5

|      |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |      |
|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|
| 1    | CTG | AGC | TGC | ATC | ATG | GTG | CGG | TCT | GTG | GCC | TGG | GCA | GGT | TTC | ATG | GTC | CTG | CTG | 54   |
| 1    |     |     |     |     | M   | V   | R   | S   | V   | A   | W   | A   | G   | F   | M   | V   | L   | L   | 14   |
| 55   | ATG | ATC | CCA | TGG | GGC | TCT | GCT | GCA | AAA | CTG | GTC | TGC | TAC | TTC | ACC | AAC | TGG | GCC | 108  |
| 15   | M   | I   | P   | W   | G   | S   | A   | A   | K   | L   | V   | C   | Y   | F   | T   | N   | W   | A   | 32   |
| 109  | CAG | TAC | AGA | CAG | GGG | GAG | GCT | CGC | TTC | CTG | CCC | AAG | GAC | TTG | GAC | CCC | AGC | CTT | 162  |
| 33   | Q   | Y   | R   | Q   | G   | E   | A   | R   | F   | L   | P   | K   | D   | L   | D   | P   | S   | L   | 50   |
| 163  | TGC | ACC | CAC | CTC | ATC | TAC | GCC | TTC | GCT | GGC | ATG | ACC | AAC | CAC | CAG | CTG | AGC | ACC | 216  |
| 51   | C   | T   | H   | L   | I   | Y   | A   | F   | A   | G   | M   | T   | N   | H   | Q   | L   | S   | T   | 68   |
| 217  | ACT | GAG | TGG | AAT | GAC | GAG | ACT | CTC | TAC | CAG | GAG | TTC | AAT | GGC | CTG | AAG | AAG | ATG | 270  |
| 69   | T   | E   | W   | N   | D   | E   | T   | L   | Y   | Q   | E   | F   | N   | G   | L   | K   | K   | M   | 86   |
| 271  | AAT | CCC | AAG | CTG | AAG | ACC | CTG | TTA | GCC | ATC | GGA | GGC | TGG | AAT | TTC | GGC | ACT | CAG | 324  |
| 87   | N   | P   | K   | L   | K   | T   | L   | L   | A   | I   | G   | G   | W   | N   | F   | G   | T   | Q   | 104  |
| 325  | AAG | TTC | ACA | GAT | ATG | GTA | GCC | ACG | GCC | AAC | AAC | CGT | CAG | ACC | TTT | GTC | AAC | TCG | 378  |
| 105  | K   | F   | T   | D   | M   | V   | A   | T   | A   | N   | N   | R   | Q   | T   | F   | V   | N   | S   | 122  |
| 379  | GCC | ATC | AGG | TTT | CTG | CGC | AAA | TAC | AGC | TTT | GAC | GGC | CTT | GAC | CTT | GAC | TGG | GAG | 432  |
| 123  | A   | I   | R   | F   | L   | R   | K   | Y   | S   | F   | D   | G   | L   | D   | L   | D   | W   | E   | 140  |
| 433  | TAC | CCA | GGA | AGC | CAG | GGG | AGC | CCT | GCC | GTA | GAC | AAG | GAG | CGC | TTC | ACA | ACC | CTG | 486  |
| 141  | Y   | P   | G   | S   | Q   | G   | S   | P   | A   | V   | D   | K   | E   | R   | F   | T   | T   | L   | 158  |
| 487  | GTA | CAG | GAC | TTG | GCC | AAT | GCC | TTC | CAG | CAG | GAA | GCC | CAG | ACC | TCA | GGG | AAC | GAA | 540  |
| 159  | V   | Q   | D   | L   | A   | N   | A   | F   | Q   | Q   | E   | A   | Q   | T   | S   | G   | K   | E   | 176  |
| 541  | CGC | CTT | CTT | CTG | AGT | GCA | GCG | GTT | CCA | GCT | GGG | CAG | ACC | TAT | GTG | GAT | GCT | GGA | 594  |
| 177  | R   | L   | L   | L   | S   | A   | A   | V   | P   | A   | G   | Q   | T   | Y   | V   | D   | A   | G   | 194  |
| 595  | TAC | GAG | GTG | GAC | AAA | ATC | GCC | CAG | AAC | CTG | GAT | TTT | GTC | AAC | CTT | ATG | GCC | TAC | 648  |
| 195  | Y   | E   | V   | D   | K   | I   | A   | Q   | N   | L   | D   | F   | V   | N   | L   | M   | A   | Y   | 212  |
| 649  | GAC | TTC | CAT | GGC | TCT | TGG | GAG | AAG | GTC | ACG | GGA | CAT | AAC | AGC | CCC | CTC | TAC | AAG | 702  |
| 213  | D   | F   | H   | G   | S   | W   | E   | K   | V   | T   | G   | H   | N   | S   | P   | L   | Y   | K   | 230  |
| 703  | AGG | CAA | GAA | GAG | AGT | GGT | GCA | GCA | GCC | AGC | CTC | AAC | GTG | GAT | GCT | GCT | GTG | CAA | 756  |
| 231  | R   | Q   | E   | E   | S   | G   | A   | A   | A   | S   | L   | N   | V   | D   | A   | A   | V   | Q   | 248  |
| 757  | CAG | TGG | CTG | CAG | AAG | GGG | ACC | CCT | GCC | AGC | AAG | CTG | ATC | CTT | GGC | ATG | CCT | ACC | 810  |
| 249  | Q   | W   | L   | Q   | K   | G   | T   | P   | A   | S   | K   | L   | I   | L   | G   | M   | P   | T   | 266  |
| 811  | TAC | GGA | CGC | TCC | TTC | ACA | CTG | GCC | TCC | TCA | TCA | GAC | ACC | AGA | GTG | GGG | GCC | CCA | 864  |
| 267  | Y   | G   | R   | S   | F   | T   | L   | A   | S   | S   | S   | D   | T   | R   | V   | G   | A   | P   | 284  |
| 865  | GCC | ACA | GGG | TCT | GGC | ACT | CCA | GGC | CCC | TTC | ACC | AAG | GAA | GGA | GGG | ATG | CTG | GCC | 918  |
| 285  | A   | T   | G   | S   | G   | T   | P   | G   | P   | F   | T   | K   | E   | G   | G   | M   | L   | A   | 302  |
| 919  | TAC | TAT | GAA | GTC | TGC | TCC | TGG | AAG | GGG | GCC | ACC | AAA | CAG | AGA | ATC | CAG | GAT | CAG | 972  |
| 303  | Y   | Y   | E   | V   | C   | S   | W   | K   | G   | A   | T   | K   | Q   | R   | I   | Q   | D   | Q   | 320  |
| 973  | AAG | GTG | CCC | TAC | ATC | TTC | CGG | GAC | AAC | CAG | TGG | GTG | GGC | TTT | GAT | GAT | GTG | GAG | 1026 |
| 321  | K   | V   | P   | Y   | I   | F   | R   | D   | N   | Q   | W   | V   | G   | F   | D   | D   | V   | E   | 338  |
| 1027 | AGC | TTC | AAA | ACC | AAG | GTC | AGC | TAT | CTG | AAG | CAG | AAG | GGA | CTG | GGC | GGG | GCC | ATG | 1080 |
| 339  | S   | F   | K   | T   | K   | V   | S   | Y   | L   | K   | Q   | K   | G   | L   | G   | G   | A   | M   | 356  |
| 1081 | GTC | TGG | GCA | CTG | GAC | TTA | GAT | GAC | TTT | GCC | GGC | TTC | TCC | TGC | AAC | CAG | GGC | CGA | 1134 |
| 357  | V   | W   | A   | L   | D   | L   | D   | D   | F   | A   | G   | F   | S   | C   | N   | Q   | G   | R   | 374  |
| 1135 | TAC | CCC | CTC | ATC | CAG | ACG | CTA | CGG | CAG | GAA | CTG | AAT | GGG | TAA | AGC | CTT | AAC | TGC | 1188 |
| 375  | Y   | P   | L   | I   | Q   | T   | L   | R   | Q   | E   | L   | N   | G   | *** |     |     |     |     | 388  |
| 1184 | CTG | TCA | CAT | GTG | AGG | CCA | GGT | GTT | GCC | TGT | GGC | ACT | GTG | CTT | CAG | CTG | TAG | GTC | 1242 |
| 1243 | TTC | CAT | ACT | TGC | CTT | CAG | GCA | CCC | CAG | AGC | TTG | AAG | TTC | CAA | AAC | CAG | GTC | AGC | 1296 |
| 1297 | CCT | CTG | AAC | CTG | AGC | ATG | GCC | CCA | GCC | CTG | GAC | AAG | ACA | CGT | TCT | GCC | AGG | GCA | 1350 |
| 1351 | AAG | CTG | ATG | GGC | TCT | ATC | CCA | ATC | CTC | GGG | AAC | GGT | CCA | GCT | TCT | ACA | GCT | GTG | 1404 |
| 1405 | CAG | CGG | GGC | GGC | TGT | TCC | AGC | AAA | GAT | GCC | CGA | CAG | GCC | TGG | TGT | TCA | GCA | ACT | 1458 |
| 1459 | CCT | GCA | AAT | GCT | GCA | CCT | GGA | ATT | GAG | TCG | TAA | AGC | CCC | TCC | AGT | CCA | GCT | TTG | 1512 |
| 1513 | AGG | CTG | GGC | CCA | GGA | TCA | CTC | TAC | AGC | CTG | CCT | CCT | GGG | TTT | TCC | TGG | GGG | CCG | 1566 |
| 1567 | CAA | TCT | GGC | TCC | TGC | AGG | CCT | TTC | TGT | GGT | CTT | CCT | TTA | TCC | AGG | CTT | TCT | GCT | 1620 |
| 1621 | CTC | AGC | CTT | GCC | TTC | CTT | TTT | TCT | GGG | TCT | CCT | GGG | CTG | CCC | CTT | TCA | CTT | GCA | 1674 |
| 1675 | AAA | TAA | ATC | TTT | GGT | TTG | TGC | CCC | TCA | AAA | AAA | AAA | AAA | AAA |     |     |     |     | 1713 |

0997827 101501

FIG - 3



09977827-101501

## FIG - 4

Chitotriosidase  
 Chitinase Autographa californica  
 Chitinase Manduca sexta  
 Chitinase Brugia malayi  
 Oviductal glycoprotein Human  
 Hcgp39 Human  
 Yml Mouse  
 Chitinase Aphanocladium album  
 Chitinase Trichoderma harzianum  
 Chitinase A1 Bacillus circulans  
 Chitinase Nicotiana tabacum class V

|   |   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|---|
| F | D | G | L | D | L | D | W | E | Y | P |
| F | D | G | V | D | I | D | W | E | F | P |
| F | D | G | L | D | L | D | W | E | Y | P |
| F | D | G | F | D | L | D | W | E | Y | P |
| F | D | G | L | D | L | F | F | L | Y | P |
| F | D | G | L | D | L | A | W | L | Y | P |
| F | D | G | L | N | L | D | W | Q | Y | P |
| F | D | G | I | D | I | D | W | E | Y | P |
| F | D | G | I | D | V | D | W | E | Y | P |
| F | D | G | V | D | L | D | W | E | Y | P |
| F | H | G | L | D | L | D | W | E | Y | P |

0997827 101501  
 105107 2282660

FIG - 5

